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# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 130.00)

Complete if Known	
Application Number	10/730,041
Filing Date	December 9, 2003
First Named Inventor	Kanwal K. Raina
Examiner Name	Not Yet Assigned
Art Unit	2879
Attorney Docket No.	M4065.0206/P206-C

METHOD OF PAYMENT (check all that apply)					FEE CALCULATION (continued)																																																																																																																																																																																								
<input type="checkbox"/> Check <input checked="" type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input type="checkbox"/> None <input checked="" type="checkbox"/> Deposit Account: Deposit Account Number <b>04-1073</b> Deposit Account Name <b>Dickstein Shapiro Morin &amp; Oshinsky LLP</b>					<b>3. ADDITIONAL FEES</b> <table border="1"> <thead> <tr> <th>Large Entity</th> <th>Small Entity</th> <th colspan="2">Fee Description</th> <th>Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> <th></th> </tr> </thead> <tbody> <tr><td>1051</td><td>130</td><td>2051</td><td>65</td><td>Surcharge - late filing fee or oath</td></tr> <tr><td>1052</td><td>50</td><td>2052</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet.</td></tr> <tr><td>1053</td><td>130</td><td>1053</td><td>130</td><td>Non-English specification</td></tr> <tr><td>1812</td><td>2,520</td><td>1812</td><td>2,520</td><td>For filing a request for ex parte reexamination</td></tr> <tr><td>1804</td><td>920*</td><td>1804</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td></tr> <tr><td>1805</td><td>1,840*</td><td>1805</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td></tr> <tr><td>1251</td><td>110</td><td>2251</td><td>55</td><td>Extension for reply within first month</td></tr> <tr><td>1252</td><td>420</td><td>2252</td><td>210</td><td>Extension for reply within second month</td></tr> <tr><td>1253</td><td>950</td><td>2253</td><td>475</td><td>Extension for reply within third month</td></tr> <tr><td>1254</td><td>1,480</td><td>2254</td><td>740</td><td>Extension for reply within fourth month</td></tr> <tr><td>1255</td><td>2,010</td><td>2255</td><td>1,005</td><td>Extension for reply within fifth month</td></tr> <tr><td>1401</td><td>330</td><td>2401</td><td>165</td><td>Notice of Appeal</td></tr> <tr><td>1402</td><td>330</td><td>2402</td><td>165</td><td>Filing a brief in support of an appeal</td></tr> <tr><td>1403</td><td>290</td><td>2403</td><td>145</td><td>Request for oral hearing</td></tr> <tr><td>1451</td><td>1,510</td><td>1451</td><td>1,510</td><td>Petition to institute a public use proceeding</td></tr> <tr><td>1452</td><td>110</td><td>2452</td><td>55</td><td>Petition to revive - unavoidable</td></tr> <tr><td>1453</td><td>1,330</td><td>2453</td><td>665</td><td>Petition to revive - unintentional</td></tr> <tr><td>1501</td><td>1,330</td><td>2501</td><td>665</td><td>Utility issue fee (or reissue)</td></tr> <tr><td>1502</td><td>480</td><td>2502</td><td>240</td><td>Design issue fee</td></tr> <tr><td>1503</td><td>640</td><td>2503</td><td>320</td><td>Plant issue fee</td></tr> <tr><td>1460</td><td>130</td><td>1460</td><td>130</td><td>Petitions to the Commissioner</td></tr> <tr><td>1807</td><td>50</td><td>1807</td><td>50</td><td>Processing fee under 37 CFR 1.17(q)</td></tr> <tr><td>1806</td><td>180</td><td>1806</td><td>180</td><td>Submission of Information Disclosure Stmt</td></tr> <tr><td>8021</td><td>40</td><td>8021</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td></tr> <tr><td>1809</td><td>770</td><td>2809</td><td>385</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td></tr> <tr><td>1810</td><td>770</td><td>2810</td><td>385</td><td>For each additional invention to be examined (37 CFR 1.129(b))</td></tr> <tr><td>1801</td><td>770</td><td>2801</td><td>385</td><td>Request for Continued Examination (RCE)</td></tr> <tr><td>1802</td><td>900</td><td>1802</td><td>900</td><td>Request for expedited examination of a design application</td></tr> <tr> <td colspan="5">Other fee (specify) _____</td> <td colspan="5">*Reduced by Basic Filing Fee Paid</td> </tr> <tr> <td colspan="5">SUBTOTAL (1) (\$ 0.00)</td> <td colspan="5">SUBTOTAL (3) (\$ 130.00)</td> </tr> <tr> <td colspan="10">**or number previously paid, if greater; For Reissues, see above</td> </tr> </tbody> </table>					Large Entity	Small Entity	Fee Description		Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)		1051	130	2051	65	Surcharge - late filing fee or oath	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	1053	130	1053	130	Non-English specification	1812	2,520	1812	2,520	For filing a request for ex parte reexamination	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	1251	110	2251	55	Extension for reply within first month	1252	420	2252	210	Extension for reply within second month	1253	950	2253	475	Extension for reply within third month	1254	1,480	2254	740	Extension for reply within fourth month	1255	2,010	2255	1,005	Extension for reply within fifth month	1401	330	2401	165	Notice of Appeal	1402	330	2402	165	Filing a brief in support of an appeal	1403	290	2403	145	Request for oral hearing	1451	1,510	1451	1,510	Petition to institute a public use proceeding	1452	110	2452	55	Petition to revive - unavoidable	1453	1,330	2453	665	Petition to revive - unintentional	1501	1,330	2501	665	Utility issue fee (or reissue)	1502	480	2502	240	Design issue fee	1503	640	2503	320	Plant issue fee	1460	130	1460	130	Petitions to the Commissioner	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	1806	180	1806	180	Submission of Information Disclosure Stmt	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	1801	770	2801	385	Request for Continued Examination (RCE)	1802	900	1802	900	Request for expedited examination of a design application	Other fee (specify) _____					*Reduced by Basic Filing Fee Paid					SUBTOTAL (1) (\$ 0.00)					SUBTOTAL (3) (\$ 130.00)					**or number previously paid, if greater; 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Name (Print/Type)	Thomas J. D'Amico			Registration No. (Attorney/Agent)	28,371	Telephone	(202) 828-2232																																																																																																																																																																																						
Signature				Date	May 6, 2004																																																																																																																																																																																								



Docket No.: M4065.0206/P206-C  
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Kanwal K. Raina

Application No.: 10/730,041

Confirmation No.: 2998

Filed: December 9, 2003

Art Unit: 2879

For: METHOD TO INCREASE THE EMISSION  
CURRENT IN FED DISPLAYS THROUGH  
THE SURFACE MODIFICATION OF THE  
EMITTERS

Examiner: Not Yet Assigned

**PETITION FOR WITHDRAWAL OF NOTICE OF OMITTED ITEM**

MS Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

05/07/2004 SZEWDIE1 00000021 10730041  
01 FC:1460 130.00 OP

Dear Sir:

Applicant petitions for withdrawal of the Notice of Omitted Item (copy attached as Exhibit A). The Notice of Omitted Item states that page 1 of the specification has been omitted.

Applicant notes that the present application is a continuation of U.S. Patent Application Serial No. 09/387,776, filed September 1, 1999, now abandoned, entitled Method To Increase The Emission Current In Fed Displays Through The Surface Modification Of The Emitters, which was incorporated by reference in its entirety in the present application (see copy of attached transmittal letter and of First Preliminary Amendment filed December 9, 2003 as Exhibit B). Thus, the specification of the present

application contains the entirety of disclosure of its prior related application, which includes page 1 of the specification. A true copy of Application Serial No. 09/387,776 is attached as Exhibit C. Accordingly, page 1 of the specification was indeed incorporated as part of the application as filed and entry of the attached duplicate copy of page 1 is requested.

In addition, Applicant respectfully contends that the allegedly omitted item was indeed deposited with the U.S. Patent and Trademark Office ("PTO") along with the application papers on December 9, 2003. Applicant notes that the filing postcard for this application, a copy of which is attached as Exhibit D, indicates that the PTO acknowledged receipt of page 1 of the specification on December 9, 2003. Applicant further notes that the specification of this application, including page 1, is a total of 13 pages in length. Thus, the entire specification, including page 1, was deposited with the PTO on December 9, 2003.

In view of the above, Applicant respectfully petitions for the above-referenced application to be accorded a filing date of December 9, 2003.

Dated: May 6, 2004

Respectfully submitted,

By 

Thomas J. D'Amico

Registration No.: 28,371

Gabriela I. Coman

Registration No.: 50,515

DICKSTEIN SHAPIRO MORIN &  
OSHINSKY LLP

2101 L Street NW

Washington, DC 20037-1526

(202) 785-9700

Attorneys for Applicant



## UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office  
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www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/730,041	12/09/2003	Kanwal K. Raina	M4065.0206/P206-C

24998  
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP  
2101 L STREET NW  
WASHINGTON, DC 20037-1526

## CONFIRMATION NO. 2998

## FORMALITIES LETTER



\*OC000000012108533\*

Date Mailed: 03/16/2004

## NOTICE OF OMITTED ITEM(S) IN A NONPROVISIONAL APPLICATION

## FILED UNDER 37 CFR 1.53(b)

A filing date has been accorded to the above-identified nonprovisional application papers; however, the following item(s) appear to have been omitted from the application:

- Page(s) 1 of the specification (description and claims).

I. Should applicant contend that the above-noted omitted item(s) was in fact deposited in the U.S. Patent and Trademark Office (USPTO) with the nonprovisional application papers, a copy of this Notice and a petition (and \$130.00 petition fee (37 CFR 1.17(h))) with evidence of such deposit **must** be filed within **TWO MONTHS** of the date of this Notice. The petition fee will be refunded if is determined that the item(s) was received by the USPTO.

II. Should applicant desire to supply the omitted item(s) and accept the date that such omitted item(s) was filed in the USPTO as the filing date of the above-identified application, a copy of this Notice, the omitted item(s) (with a supplemental oath or declaration in compliance with 37 CFR 1.63 and 1.64 referring to such items), and a petition under 37 CFR 1.182 (with the \$130.00 petition fee (37 CFR 1.17(h))) requesting the later filing date **must** be filed within **TWO MONTHS** of the date of this Notice.

Applicant is advised that generally the filing fee required for an application is the filing fee in effect on the filing date accorded the application and that payment of the requisite basic filing fee on a date later than the filing date of the application requires payment of a surcharge (37 CFR 1.16(e)). To avoid processing delays and payment of a surcharge, applicant should submit any balance due for the requisite filing fee based on the later filing date being requested when submitting the omitted items(s) and the petition (and petition fee) requesting the later filing date.

III. The failure to file a petition (and petition fee) under the above options (I) or (II) within **TWO MONTHS** of the date of this Notice (37 CFR 1.181(f)) will be treated as a constructive acceptance by the applicant of the application as deposited in the USPTO. **THIS TWO MONTH PERIOD IS NOT EXTENDABLE UNDER 37 CFR 1.136(a) OR (b).** In the absence of a timely filed petition in reply to this Notice, the application will maintain a filing date as of the date of deposit of the application papers in the USPTO, and original application papers (i.e., the original disclosure of the invention) will include only those application papers present in the USPTO on the date of deposit.

In the event that applicant elects not to take action pursuant to options (I) or (II) above (thereby constructively electing option (III)), amendment of the specification to renumber the pages consecutively and cancel incomplete sentences caused by any omitted page(s), and/or amendment of the specification to cancel all references to any omitted drawing(s), relabel the drawing figures to be numbered consecutively (if necessary), and correct the

references in the specification to the drawing figures to correspond with any relabeled drawing figures, is required. A copy of the drawing figures showing the proposed changes in red ink should accompany with any drawing changes . Such amendment and/or correction to the drawing figures, if necessary, should be by way of preliminary amendment submitted prior to the first Office action to avoid delays in the prosecution of the application.

Replies should be mailed to: Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

*A copy of this notice **MUST** be returned with the reply.*

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PART 2 - COPY TO BE RETURNED WITH RESPONSE



**METHOD TO INCREASE THE EMISSION CURRENT IN FED  
DISPLAYS THROUGH THE  
SURFACE MODIFICATION OF THE EMITTERS**

5

**BACKGROUND OF THE INVENTION**

**I. FIELD OF THE INVENTION**

The present invention relates generally to display devices implementing Field Emission Display (FED) technology. More specifically, the invention relates to a method for increasing the emission current of the current emitters of a Field Emission Display (FED).  
10

**II. DESCRIPTION OF THE RELATED ART**

Until recently, the cathode ray tube (“CRT”) had been the primary device for displaying information. While having sufficient display characteristics with respect to color, brightness, contrast, and resolution, CRT’s are relatively bulky and consume large amounts of power. In view of the advent of portable laptop computers, the demand has intensified for a display technology which is light-weight, compact, and power efficient.  
15

One available technology is flat panel displays, and more particularly, Liquid Crystal Display (“LCD”) devices. LCDs are currently used for laptop computers. However, these LCD devices provide poor contrast in comparison to CRT technology. Further, LCDs offer only a limited angular display range. Moreover, color LCD devices consume power at rates incompatible with extended battery operation. Lastly, a color LCD type screen tends to be far more costly than an equivalent CRT.  
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FED technology has recently come into favor as one technology for



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<b>UTILITY PATENT APPLICATION TRANSMITTAL</b> <i>(Only for new nonprovisional applications under 37 CFR 1.53(b))</i>		<b>Attorney Docket No.</b>	M4065.0206/P206-C	
		<b>First Inventor</b>	Kanwal K. Raina	
		<b>Title</b>	METHOD TO INCREASE THE EMISSION CURRENT IN FED DISPLAYS THROUGH THE SURFACE MODIFICATION OF THE EMITTERS	
		<b>Express Mail Label No.</b>		
<b>APPLICATION ELEMENTS</b> <i>See MPEP chapter 600 concerning utility patent application contents.</i>		<b>MS Patent Application</b> <b>ADDRESS TO:</b> Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450		
1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) <i>(Submit an original, and a duplicate for fee processing)</i>		7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)		
2. <input type="checkbox"/> Applicant claims small entity status. <i>See 37 CFR 1.27.</i>		8. <input type="checkbox"/> Nucleotide and/or Amino Acid Sequence Submission <i>(if applicable, all necessary)</i>		
3. <input checked="" type="checkbox"/> Specification <span style="border: 1px solid black; padding: 2px;">[Total Pages 13]</span>		a. <input type="checkbox"/> Computer Readable Form (CRF) b. Specification Sequence Listing on: i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or      ii. <input type="checkbox"/> Paper c. <input type="checkbox"/> Statements verifying identity of above copies		
4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) <span style="border: 1px solid black; padding: 2px;">[Total Sheets 6]</span>		<b>ACCOMPANYING APPLICATION PARTS</b>		
5. Oath or Declaration <span style="border: 1px solid black; padding: 2px;">[Total Sheets 2]</span>		9. <input type="checkbox"/> Assignment Papers (cover sheet & document(s)) 10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <span style="border: 1px solid black; padding: 2px;">(when there is an assignee)</span> <input type="checkbox"/> Power of Attorney		
a. <input type="checkbox"/> Newly executed (original or copy) b. <input checked="" type="checkbox"/> Copy from a prior application (37 CFR 1.63(d)) <i>(for continuation/divisional with Box 18 completed)</i>		11. <input type="checkbox"/> English Translation Document <i>(if applicable)</i> 12. <input checked="" type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations 13. <input checked="" type="checkbox"/> Preliminary Amendment 14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) <i>(Should be specifically itemized)</i> 15. <input type="checkbox"/> Certified Copy of Priority Document(s) <i>(if foreign priority is claimed)</i> 16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). 17. <input type="checkbox"/> Other: <span style="border: 1px solid black; padding: 2px;"> </span>		
6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76				
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: <input checked="" type="checkbox"/> Continuation <input type="checkbox"/> Divisional <input type="checkbox"/> Continuation-in-part (CIP)   of prior application No.: <u>09/387,776</u>				
Prior application information: Examiner <u>Michael Cleveland</u> Art Unit: <u>1762</u>				
<b>For CONTINUATION OR DIVISIONAL APPS only:</b> The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation <u>can only</u> be relied upon when a portion has been inadvertently omitted from the submitted application parts.				
<b>19. CORRESPONDENCE ADDRESS</b>				
<input checked="" type="checkbox"/> Customer Number: <u>24998</u> OR <input type="checkbox"/> Correspondence address below				
Name	DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP Thomas J. D'Amico			
Address	2101 L Street NW			
City	Washington	State	DC	Zip Code
Country	US	Telephone	(202) 785-9700	Fax (202) 887-0689
Name (Print/Type)	Thomas J. D'Amico		Registration No. (Attorney/Agent)	28,371
Signature			Date	December 9, 2003